



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D5412-041
Job Sheet 170196

Accounting Job RD17-1027-01



Part No: D5412-041

Job Qty: 24 ea

Part Name: Crosstube Clamp Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 1/11/18

Job Tracking No:

Due Date: 1/18/18

Created By: Mario Poulin

Type: R+D

Description:

Note: D5412 REV.B IPP Rev: A RQ 16.09.21 Veffied by: DD IPP REV: B 17.10.16 AS PER DWG REV.b DD
VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	24 Ea		1/13/18	0.00	0.00	Start Up Machining-4		18-02-22
100	Bandsaw	24 pcs		1/13/18	0.00	0.00	Bandsaw1		18-02-22
110	CNC Vertical Machining	24 pcs		1/17/18	0.00	47.06	HAAS1-2		18-02-22
120	QC	24 pcs		1/17/18	0.00	0.00	QC2 Machining-4		18-02-22
130	QC	24 pcs		1/17/18	0.00	0.00	QC8 Machining-4		18-02-22
140	HandFinish	24 pcs		1/17/18	0.00	7.10	HandFinish1		18-03-01
150	SprayPaint	24 pcs		1/17/18	0.00	6.00	Spray Paint		18-03-01
160	QC	24 pcs		1/17/18	0.00	0.00	QC14		11 APR 11 2018
165	Small Fab	24 pcs		1/18/18	0.00	5.04	Small Fab-1		9-38 FF
168	QC	24 pcs		1/18/18	0.00	0.00	QC5		APR 27 2018
170	Packaging	24 pcs		1/18/18	0.00	0.00	Packaging3-2		MAY 01 2018
180	QC21-SA	24 Ea		1/18/18	0.00	0.00	QC21		MAY 01 2018

Part Op 100 - Cut Blanks 4.80" long

Descriptions: 110 - Machine as per Folio FB497 Folio Rev: _____ Dwg Rev: _____ 2-Deburr

120 - QC2- Inspect parts off machine FAI/FAIB

130 - QC8- Inspect parts - second check

140 - Chemical Conversion Coat per QSI005 4.1

150 - ***MASK THREAD*** PRIME AS PER DWG QSI005 4.2.1.3.3 BATCH: 138747 PAINT AS PER DWG

QSI005 4.2.2.4 BATCH: 138819

160 - QC14- Inspect Spray Paint

165 - INSTALL HELICOIL AND BOLT AS PER DRAWING. ***INSTALL BOLT LOOSE AS PER NOTE 9***

168 - QC5- Inspect part completeness to step on W/O

170 - Identify as per dwg & Stock Location: _____

180 - QC21- Final Inspection - Work Order Release

S036065

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M6061T6B1.250X04.500	10	16	0	0
165-Small Fab	MS20002C4	24	92	0	0
	MS21209-F420	24	50	0	0
	MS21250-04012	24	0	0	0

Part Specifications



Container No: 8044790



Part: D5412-041

Job No: 170196

Serial No/Batch: 8044790

Revision: D5412

Inspector:

DART Aerospace Ltd.
1270 Aberdeen Street
Newbury, ON K64 1K7
CANADA
TEL: 1 813 632-6200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 02/22/18

DART AEROSPACE LTD		Work Order:	170196
Description:		Part Number:	DS412-041
Inspection Dwg:	Rev:	Page 1 of 1	

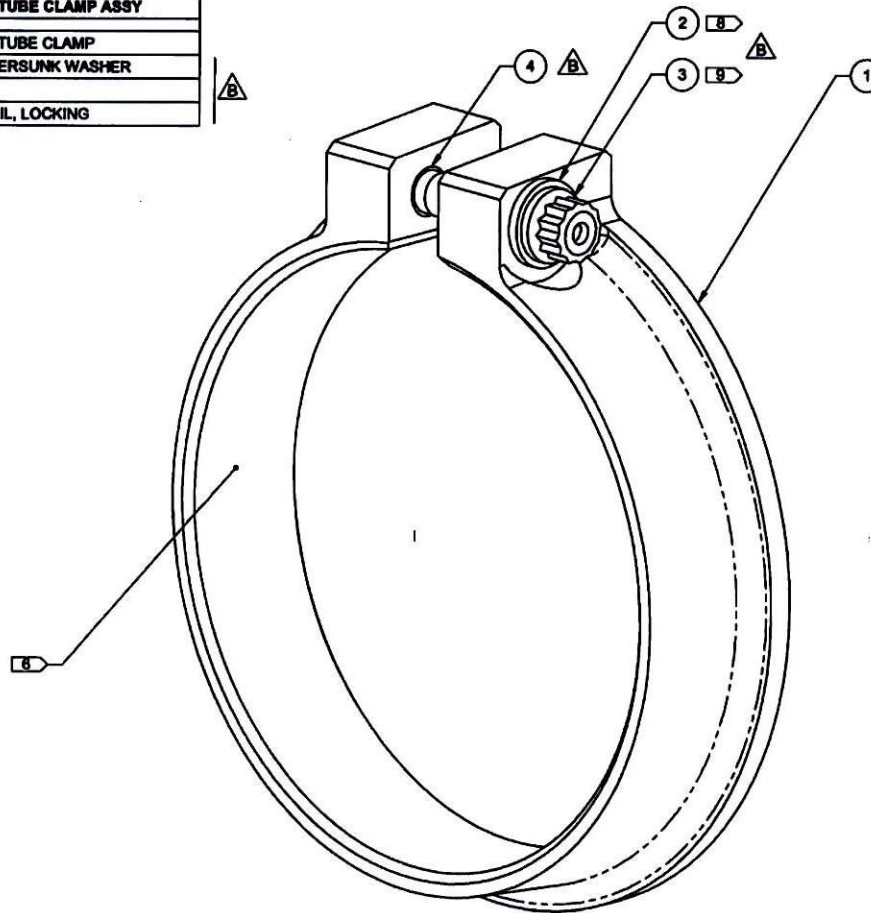
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.500	+/- .010	.497	✓		SL10	Vein
.500	+/- .010	.498	✓		"	
R.13	+/- .030	.125	✓		Rad gauge	
3.60	+/- .030	3.600	✓		SL10	Vein
4.30	+/- .030	4.300	✓		"	
Ø .302	+ .006 / - .001	.304	✓		"	
Ø .352 X 45°	+/- .010 X .5°	.350 X 45°	✓		"	
Ø .70	+/- .030	.698	✓		"	
.325	+/- .010	.327	✓		"	
5°	+/- .5°	5°	✓		Protractor	
.15	+/- .030	.148	✓		SL10	Vein
.90	+/- .030	.901	✓		"	
1/4-28 NF STI	—	1/4-28 STI	✓		Thread gauge	
.40	+/- .030	.400	✓		SL10	Vein
2.350	+/- .010	2.350	✓		Height gauge	
2.079	+/- .010	2.082	✓		"	
.030 X 45°	+/- .010 X .5°	.030 X 45°	✓		SL10	Vein

Measured by:	DAS 20 9-89	Audited by:	mml	Preliminary Approval:	
Date:	18-02-21	Date:	18/02/28	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

ITEM	QTY -041	P/N	DESCRIPTION
	X	D5412-041	CROSSTUBE CLAMP ASSY
1	1	D5412-1	CROSSTUBE CLAMP
2	1	MS20002C4	COUNTERSUNK WASHER
3	1	MS21250-04012	BOLT
4	1	MS21209F4-20	HELICOIL, LOCKING



D5412-041 CROSSTUBE CLAMP ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP N/A
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.27 lbs
- 8) INSTALL MS20002C4 WASHER WITH COUNTERSUNK FACE AGAINST BOLT
- 9) INSTALL MS21250-04014 BOLT LOOSE

RELEASED

2017 SEP 25
ECN 17-571

B	REVISE NOTES, REVISE HELICOIL P/N, ADD MS20002C4 WASHER, REDUCE BOLT LENGTH FOR BETTER FIT	ML	17.09.25
A	NEW ISSUE	ML	17.05.25
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ML		
CHECKED	NO	DRAWING NO.	REV. B
MFG. APPR.	DP	D5412	SHEET 1 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	CP	CROSSTUBE CLAMP	NTS
DATE	17.09.25	COPYRIGHT © 2017 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED